





Routine Imaging for Low Back Pain

The Agency for Healthcare Policy and Research released a guideline that recommended against lumbar imaging in the first month of acute low back pain, based on observations of a low frequency of serious conditions, a high likelihood the back pain will improve on its own, and a weak correlation between the findings on imaging studies and treatment decisions. The exception to this recommendation was in patients with **"red flags"** ¹ (see below).

An authoritative article in a 2009 issue of Lancet concludes that "Lumbar imaging for low back pain without indications of serious underlying conditions does not improve clinical outcomes." "Therefore, clinicians should refrain from routine, immediate lumbar imaging in patients with acute or sub-acute low back pain and without features suggesting a serious underlying condition." ²

Traditionally, the plain radiograph has been the first imaging test performed in the evaluation of low back pain.

Two major drawbacks to radiography are:

- Difficulty in interpretation and
- Unacceptably high rate of false-positive findings.³

Plain radiographs are not required in the first month of symptoms unless the physical examination reveals specific signs of trauma or there is suspicion of tumor or infection.

"RED FLAG" INDICATORS

- 1. New onset pain in adults 50 years of age or older without h/o injury
- 2. Unrelenting night pain or pain at rest (increased incidence of clinically significant pathology)
- 3. History of other systemic diseases
- 4. Neuromotor or sensory deficit
- 5. Chronic oral steroids or immunosuppressive therapy
- 6. History of or suspicion of cancer (rule out metastatic disease)
- 7. Fever above 38C (100.4F) for greater than 48 hours
- 8. History of or suspected osteoporosis

¹ Bigos SJ. Acute low back problems in adults. Rockville, Md.: U.S. Department of Health and Human Services, Public Health Service, Agency for Health Care Policy and Research, 1994; AHCPR publication no. 95-0642

² Kochen MM, Blozik E, Chenot J, Imaging for low-back pain The Lancet, Volume 373, Issue 9662, Pages 436 - 437, 7 February 2009 Inaoka M, Yamazaki Y, Hosono N, Tada K, Yonenobu K. Radiographic analysis of lumbar spine for low-back pain in the general population. Arch Orthop Trauma Surg 2000;120:380-5.